

SOLUTIONS  
FOR SAFETY





# SOLUTIONS FOR SAFETY

LOVATO Electric offers a wide range of safety devices designed to ensure maximum protection and reliability in every industrial application.

LOVATO Electric safety devices are designed to meet different application requirements, combining performance and functionality without compromising on design.

## Reliability

- Significant experience in the production of contactors and safety limit switches
- Long mechanical life
- Positive contact opening.

## Wide range

- Vast offer of products for the safety of people and machines
- Continuous research and development to offer a LOVATO Electric safety solution.

## High performance

- Safety relays, RFID safety sensors and safety switches with solenoid with performance up to Cat. 4, PLe according to EN/ISO 13849-1
- Effective risk reduction for operators and machines in compliance with the most stringent safety requirements.



LOVATO Electric's range of solutions includes both electromechanical products, such as mushroom button actuators for emergency stop, limit switches and safety contactors, and electronic products such as RFID sensors, safety relays and electronic motor starters with integrated Safe Torque Off function, offering a perfect mix of tradition and innovation.

Find out  
more



## Innovation

- RFID safety sensors with two types of coded levels and two different types of connector
- Intuitive and versatile programmable safety relay.

## Simplicity

- Quick and easy mounting, suitable for 35mm DIN rail mounting for safety relays, electronic motor starters and safety contactors
- Simplified connection thanks to M8 or M12 connectors integrated in RFID safety sensors and control stations for 40mm profile rails.

## Design

- Compact design that makes these devices suitable for installation in any application.





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## Safety input devices



### Mushroom-head pushbutton actuators, latching, for emergency stop

- Plastic and metal versions
- Pull-to-release, turn-to-release and turn-key-to-release versions
- Illuminated version available
- Long mechanical life of actuators.



### Illuminated plastic disk

- Dual function with steady or flashing light
- Versions with auxiliary supply voltage 24VAC/DC, 110...120VAC or 220...240VAC
- Marking available in several languages and symbols.



### Plastic control stations complete with mushroom-head pushbutton for emergency stop

- Compact dimensions
- Easy wiring and high number of cable entries
- Complete with contact elements base-mounted on control station
- IP66, IP67 and IP69K.



### Auto-monitoring contact

- Compatible with non-illuminated latch mushroom-head pushbuttons
- Compact footprint of only one contact element
- Direct opening operation of NC contact in accordance with IEC/EN 60947-5-1.



### Plastic control stations for 40mm profile rails with mushroom-head pushbutton

- Quick and easy installation thanks to the metal clip supplied as standard
- Complete with operators and contact elements
- Easy wiring via integrated M12 connector
- IP65.



### RFID safety sensors

- Double coding level: generic or Teach-in
- Versions with M12 or pigtail connector
- Status LEDs visible from all directions.







### Safety limit switches

- Plastic or metal housing with dimensions in accordance with EN 50047
- Hinge operating, slotted lever and key operated versions
- Operating head fixing with locking bayonet insert.



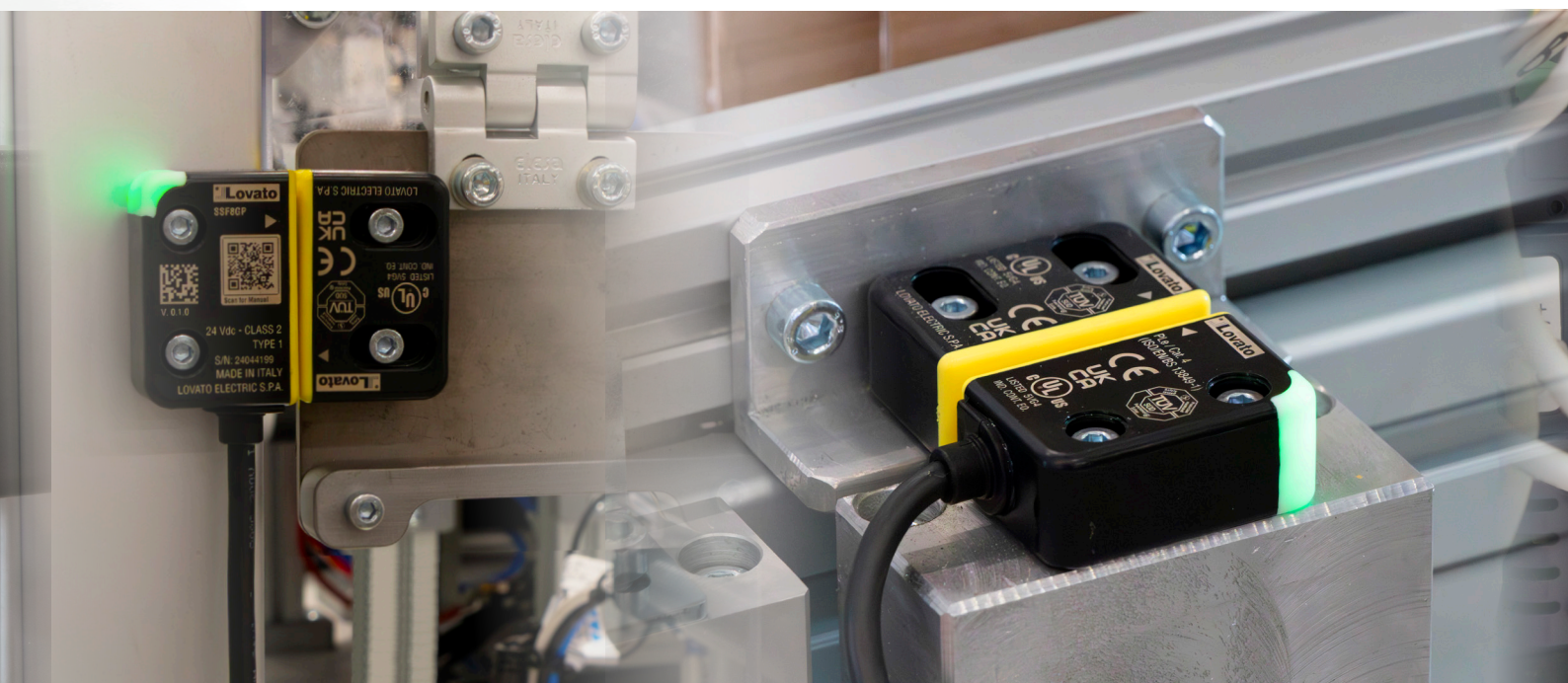
### Safety switches with locked actuator solenoid

- Avoid access in hazardous areas until the receiving of an appropriate signal
- Locked actuator with energised or de-energised solenoid
- Different electric contact combinations actuated separately by key actuator or by solenoid
- Suitable for safety applications with SIL3 and PLe performance.



### Rope-pull lever limit switches for emergency stop

- Suitable for emergency stop or alarm systems for machines which occupies a large space
- Versions complete with reset button
- Configurations with plastic or metal housing to satisfy the most diversified requirements for sturdiness and size.





## Safety logic devices



### Safety relays SRC series

- Single function versions designed for safety control of emergency stop, safety access, electromechanical interlock, magnetic safety switch, etc.
- Diagnostics of the safety circuit through LED indication
- Versions with screw or spring-clamp (Push-in) terminals
- Designed for applications up to Cat.4, with safety integrity level SIL3 (EN61508) and performance level PLe (ISO 13849-1).



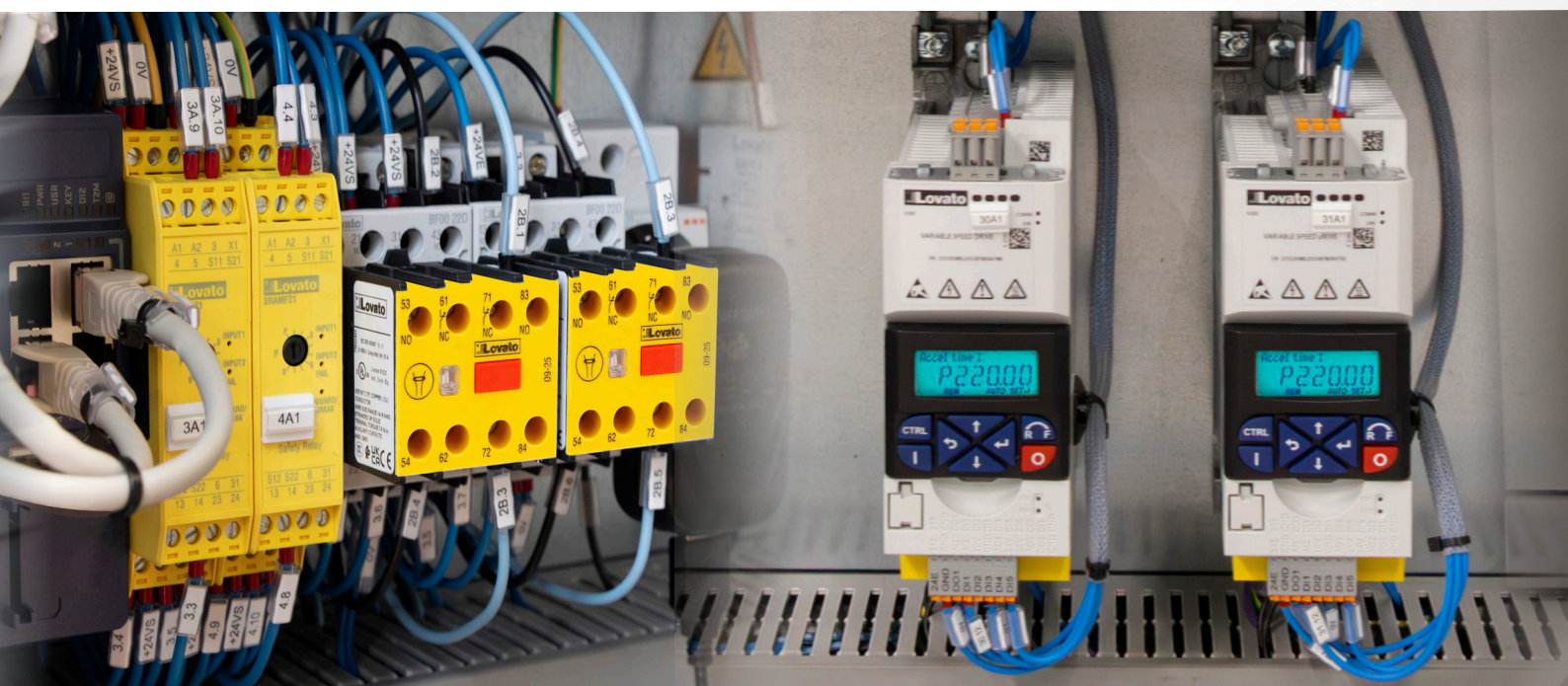
### Safety relays SRA series

- Single function versions designed for safety control of light curtains, two-hand control devices, laser scanner and RFID
- Multifunction version that offers the possibility of having all the safety functions of the SRC series and the SRA single function versions in a single device, which can be set via a frontal trimmer
- Designed for applications up to Cat.4, with safety integrity level SIL3 (EN61508) and performance level PLe (ISO 13849-1).



### Programmable safety relays SRP series

- Configurable via dedicated software freely downloadable from [www.LovatoElectric.com](http://www.LovatoElectric.com)
- Easily integrated into applications with light curtains, photocells, emergency stops, RFID sensors, two hand devices, etc
- High number of inputs, outputs and logical operators
- Designed for applications up to Cat.4, with safety integrity level SIL3 (EN61508) and performance level PLe (ISO 13849-1).





## Safety output devices



### Safety contactors BFS type

- Rated current 9A to 38A (AC-3)
- AC or DC coil
- Built-in 'Mirror contact' and 'Mechanically linked contacts' functions
- Contactor status of open or closed is visible from the front
- Non-removable auxiliary contact block to prevent tampering
- Yellow cover to highlight the devices involved in the safety chain.



### Variable speed drives with STO (Safe Torque Off) VLB series

- Optional STO (Safe Torque Off) module with safety integrity level SIL3 (EN61508) and performance level PLe (ISO 13849-1)
- Compatible with VLB series variable speed drives with single-phase power supply (0.4kW to 2.2kW 230VAC) or three-phase power supply (0.4kW to 110kW 400VAC)
- Built-in EMC suppressor
- Wide range of functions for motor control and fieldbus.



### Electronic motor starters with STO (Safe Torque Off) ME series

- Direct-on-line or reversing starters for motors up to 7A (AC-3)
- Integrated motor thermal protection with tripping class 10A
- Versions with STO (Safe Torque Off) emergency stop with safety integrity level SIL3 (EN61508) and performance level PLe (ISO 13849-1).







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ENERGY AND AUTOMATION

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